

INFORMATION DISCLOSURE STATEMENT

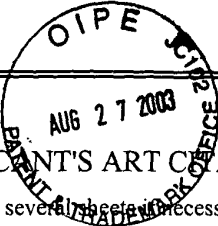
Japanese Patent Publication 1996-180206 discloses topographic measurement system in which a pair of stereoscopic picture frames of a target area captured from different positions is processed in radiation intensity so that their luminance level is compensated and further processed so that their azimuth angles are aligned in parallel. The stereoscopic picture frames are further subjected to a coordinate conversion and interpolation processes so that their visual points are translated to a virtual plane and their pixels are interpolated.

Japanese Patent Publication 1998-197244 discloses an earth observation system using observation satellites. In this system, the satellites have different line-of-sight directions and vertical directions from each other. Each earth observation satellite includes three or more antennas for receiving signals from a navigation satellite to determine their coordinate positions. The pictures of a target area captured by these earth observation satellites are sent to a topographic analyzer where they are aligned together to analyze the surface features of the target area by using the coordinate positions of the earth observation satellites and their line-of-sight directions and parallax data.

Japanese Patent Publication 1999-278400 discloses a satellite position observation system in which a spaceship is provided with an image sensor fitted with optical lens of constant magnifications. A target satellite is monitored by the spacecraft to acquire pictures of the target satellite at regular intervals. The output of the image sensor is processed so that it takes on binary values. The two-valued picture frame of the satellite is calculated to yield the size of an area occupied by the satellite and the distance to the satellite is determined. Based on the center position of the area, a lead angle is determined.

Japanese Patent Publication 2002-63580 discloses a topographic

measurement system in which a number of picture frames of a target area are combined and processed by a computer in a digital format. The picture frames are either captured by satellites and airplanes. The frames are evaluated. For each picture frame, a transfer function is determined for projecting points in the three-dimensional coordinate system on the ground to corresponding points in the two-dimensional coordinate system of the picture frame. An extended stereoscopic model is derived from the transfer function. A free-form window is defined with respect to the extended stereoscopic model. By giving vertical dimension to the free-form window, surface features of luminance picture frames are given altitudes.

 APPLICANT'S ART CITATION (Use several sheets if necessary)		Application 10/600,087		OFGS File No. P/289=169			
		Applicant Makoto MARUYA					
		Filing Date June 20, 2003		Group Art Unit			
U.S. PATENT DOCUMENTS							
Examiner Initial	Document Number	Date MM-YYYY	Name	Class	Sub-class	Filing Date If Appropriate	
	US-						
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FOREIGN PATENT DOCUMENTS							
	Document Number	Date MM-YYYY	Country	Class	Sub-class	Translation	
						Yes	No
	JP-A 8-180206	07-1996	Japan				X
	JP-A 10-197244	07-1998	Japan				X
	JP-A 11-278400	10-1998	Japan				X
	P2002-63580	02-2002	Japan				X
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)							
		Applicant's summarization in English of Japanese patent nos. 8-180206; 10-197244;					
		11-278400 and P2002-63580					
Examiner		Date Considered					
EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.							